



Command, Control, Communication and Computer Intelligence Reconnaissance (C4ISR)

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Navy IPO C4ISR Strategy

- **Successful Coalition/Allied Warfare depends upon Coalition and Alliance Building and Interoperability**
- **Capabilities Focus - Sea Power 21 aligns US naval missions networked with our coalition partners and allies**
- **Countries Small to Big -- all important**
- **Way ahead:**
 - **Current and future international coalitions require coordinated matching of interoperability requirements now**
 - To meet each country's own homeland defense requirements
 - To meet COCOM objectives
 - **We want to:**
 - Build on advanced capability planning
 - Work with our partners/allies to foster the best robust, phased strategy-to-systems process to link our capabilities
 - **Combined C4ISR delivers a powerful, collective force in the Global War on Terrorism**

C4ISR - A SEAPOWER 21 FOCUS

- Security Cooperation Objectives
- Coalition Sea Power 21 Capabilities
- Strategy to Systems
- C4ISR Roadmap
- Summary

Security Cooperation Objectives

Coalition Building



**Interoperability with
Global Naval Partners**



Foreign Capabilities



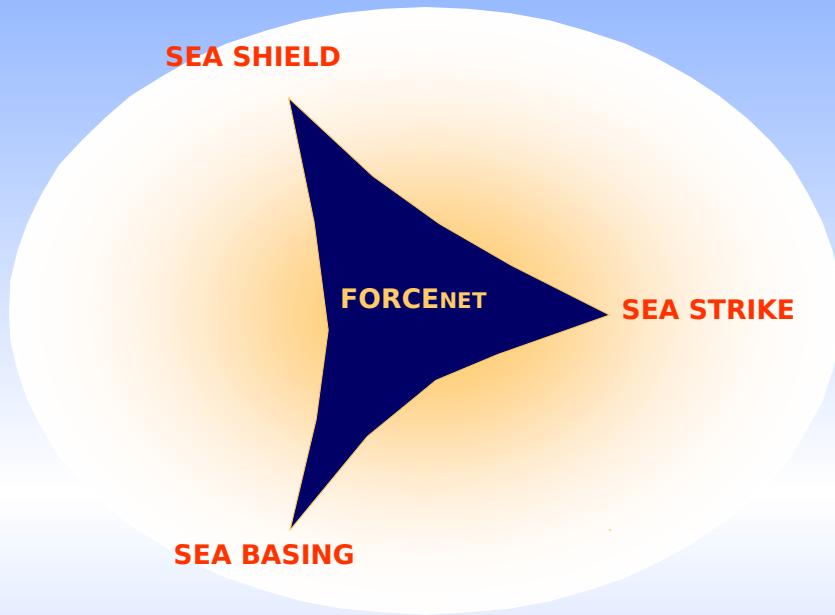
Navy IPO collaborates with other government agencies to support implementation of partner maritime / aviation objectives -- focused on capabilities

Naval Transformation Trends

RECAPITALIZATION & MODERNIZATION ARE MAKING U.S. NAVAL FORCES MORE . . .

- **EXPEDITIONARY**
 - **LIGHTER, MORE FLEXIBLE FORCES**
 - **MORE LETHAL POWER**
- **JOINT**
 - **WITH OTHER SERVICES & ALLIES**
- **NETWORKED**
 - **LINKAGE OF ALL ASSETS IN THE “BATTLESPACE”**
 - **PERSISTENT INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE (ISR)**
- **PRECISE**
 - **REDUCED “SENSOR-TO-SHOOTER” TIMELINES**
 - **PRECISION FROM DISTANCE**
- **ALIGNED IN ORGANIZATION**
 - **BUSINESS EFFICIENCIES**
 - **MORE SUPPORT FOR FLEET WARFIGHTERS**
- **RELIANT ON UNMANNED ASSETS**
 - **UAVs, UCAVs, UUVs**

Capabilities Alignment



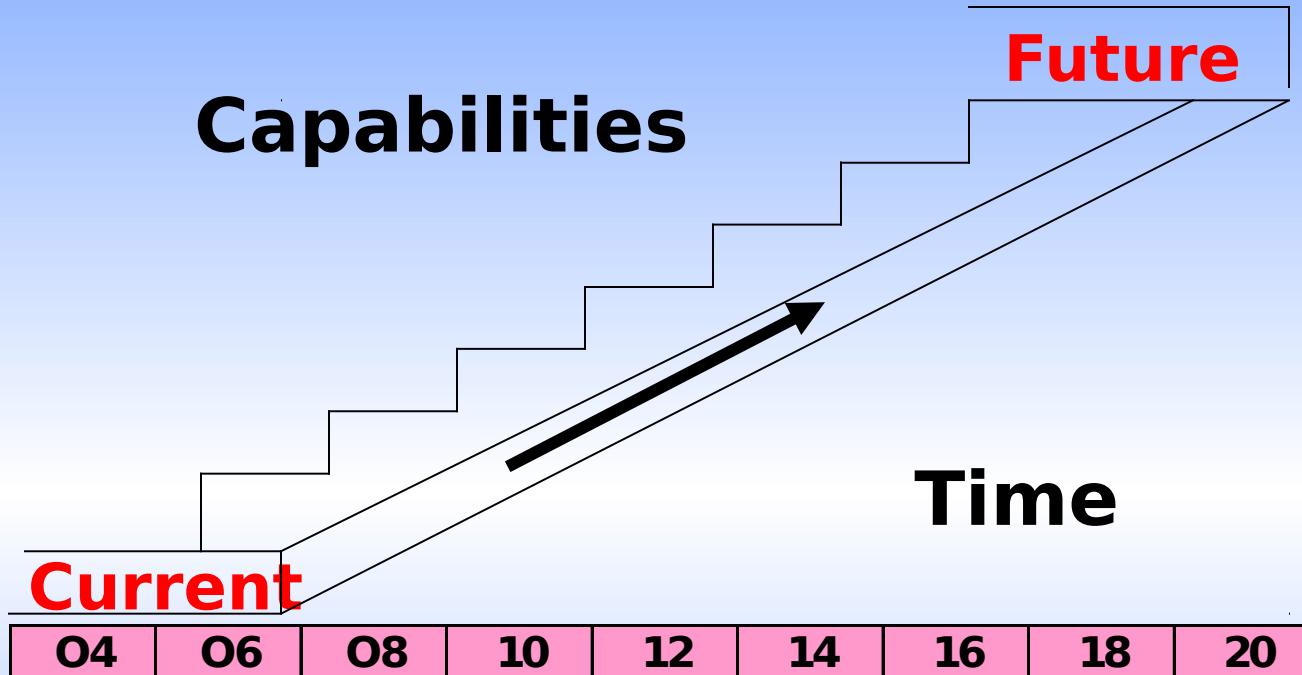
**Sea Power 21 Pillars:
Sea Strike, Sea Shield, Sea Basing, and
FORCENet**

Coalition Seapower 21

Capabilities

Sea Strike	Sea Shield	Sea Basing	FORCENet
Conduct Strike Ops	Protect Against SOF/Terrorist Threats	Provide Sea Base Force Protection	Provide Network Protection
Conduct Special Ops	Provide Search & Rescue	Provide Administrative Sea Lift	Provide Information Transfer
Conduct Offensive Information Ops (EW/CNA)	Provide Self-Defense vs. Surface Threats	Provide Sustainment for Operations at Sea	Provide Deployable ISR Assets
Provide Naval Fires	Conduct Offensive Operations vs. Surface Threats	Provide Sustainment for Operations Ashore	Share ISR Across the Force
Provide Indigenous Amphibious Assault Forces	Conduct Expeditionary MIO/LIO Ops		Participate in Mission Planning
Conduct Ship to Objective Maneuver (STOM)	Conduct Escort Ops		Maintain Operational Level Situational Awareness
	Neutralize Submarine Threats in the Littorals		Maintain Tactical Level Situational Awareness
	Neutralize Open Ocean Submarine Threats		

Country Stair Steps to Capabilities



Coalition and Interoperability Partner Goals

Minimum Ability to:

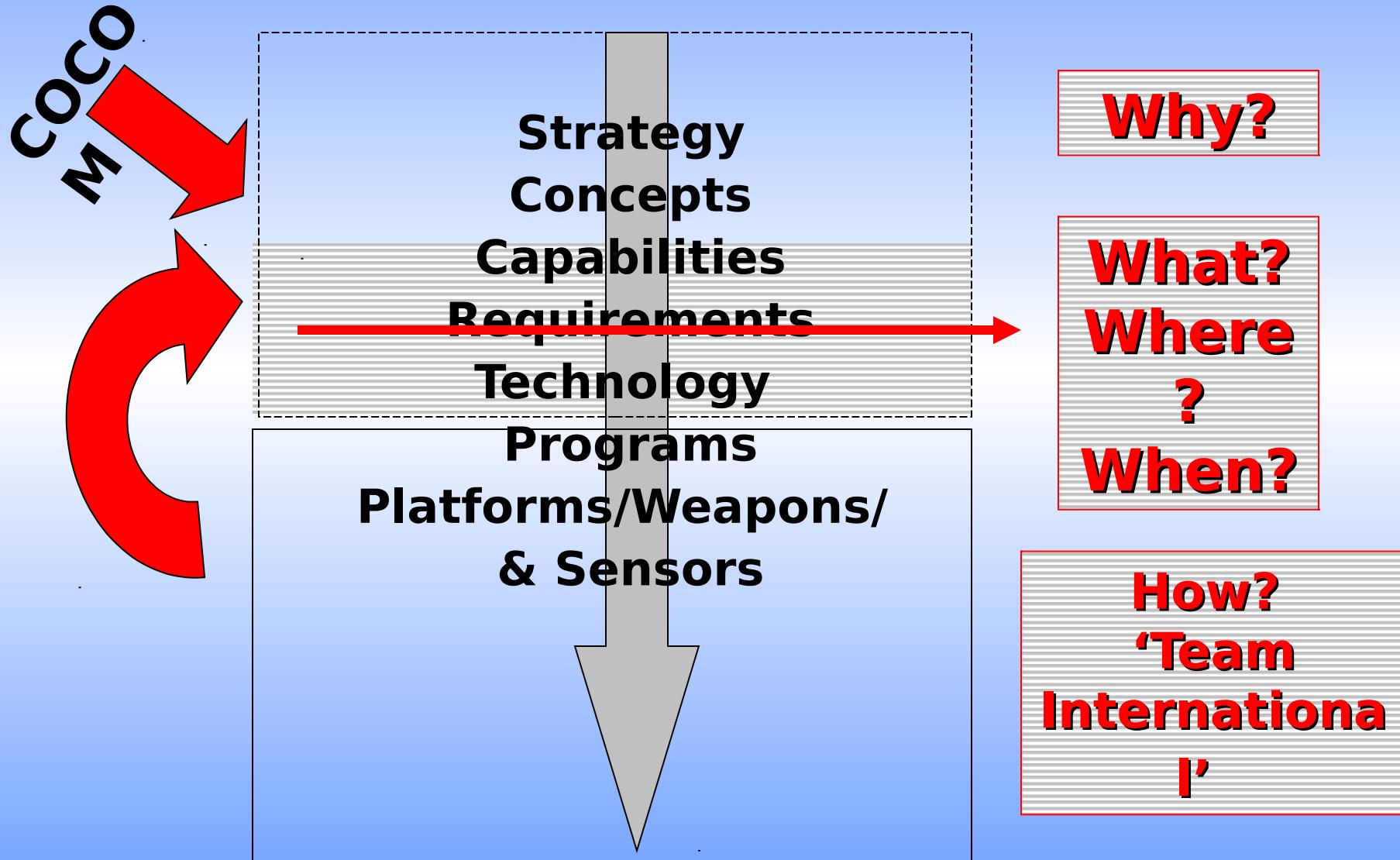
Link into U.S. theater command nets

**Contribute to common operational and tactical
picture**

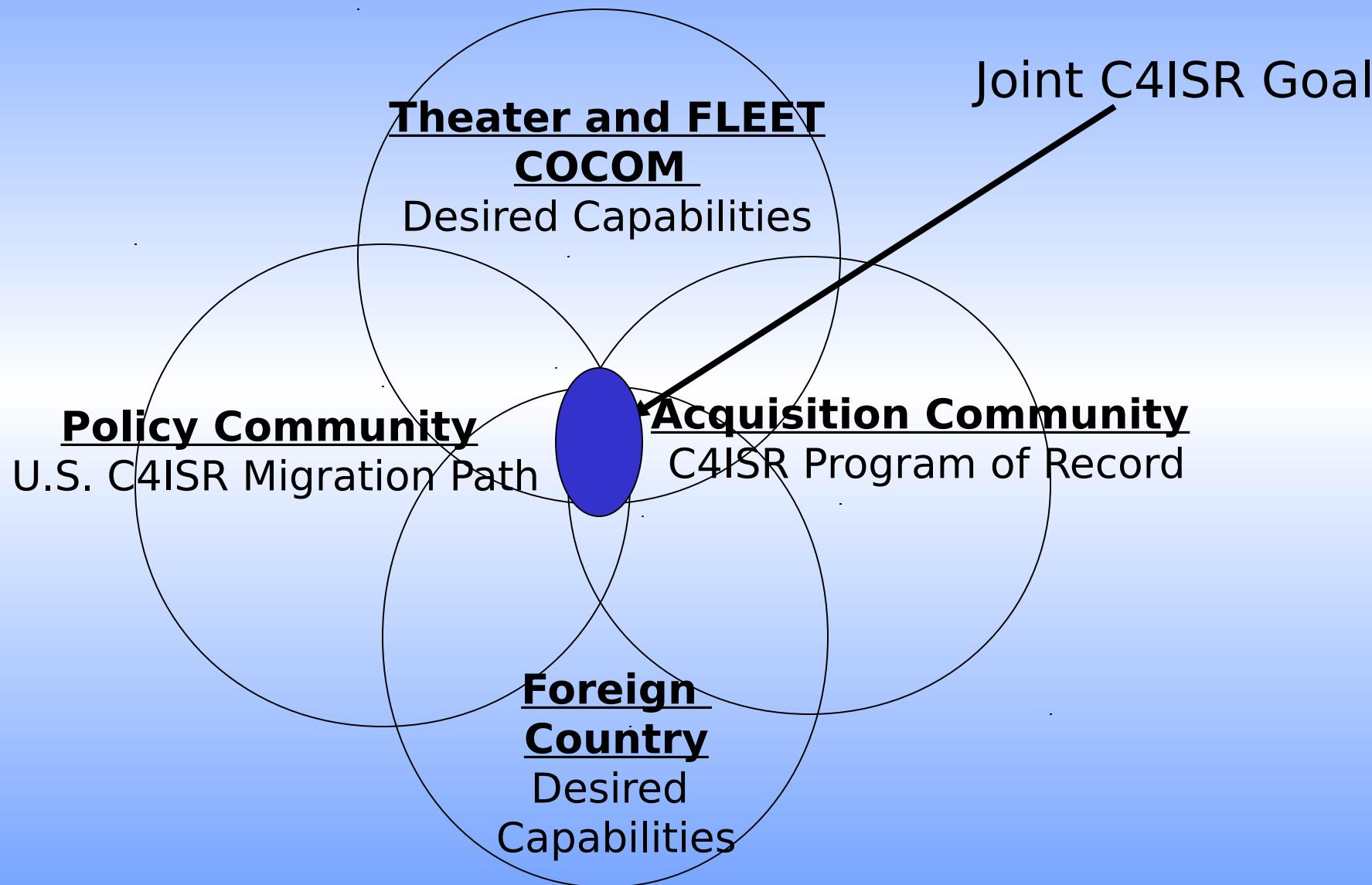
Coordinate air, surface and subsurface operations

Country Homeland Defense

Strategy to Systems



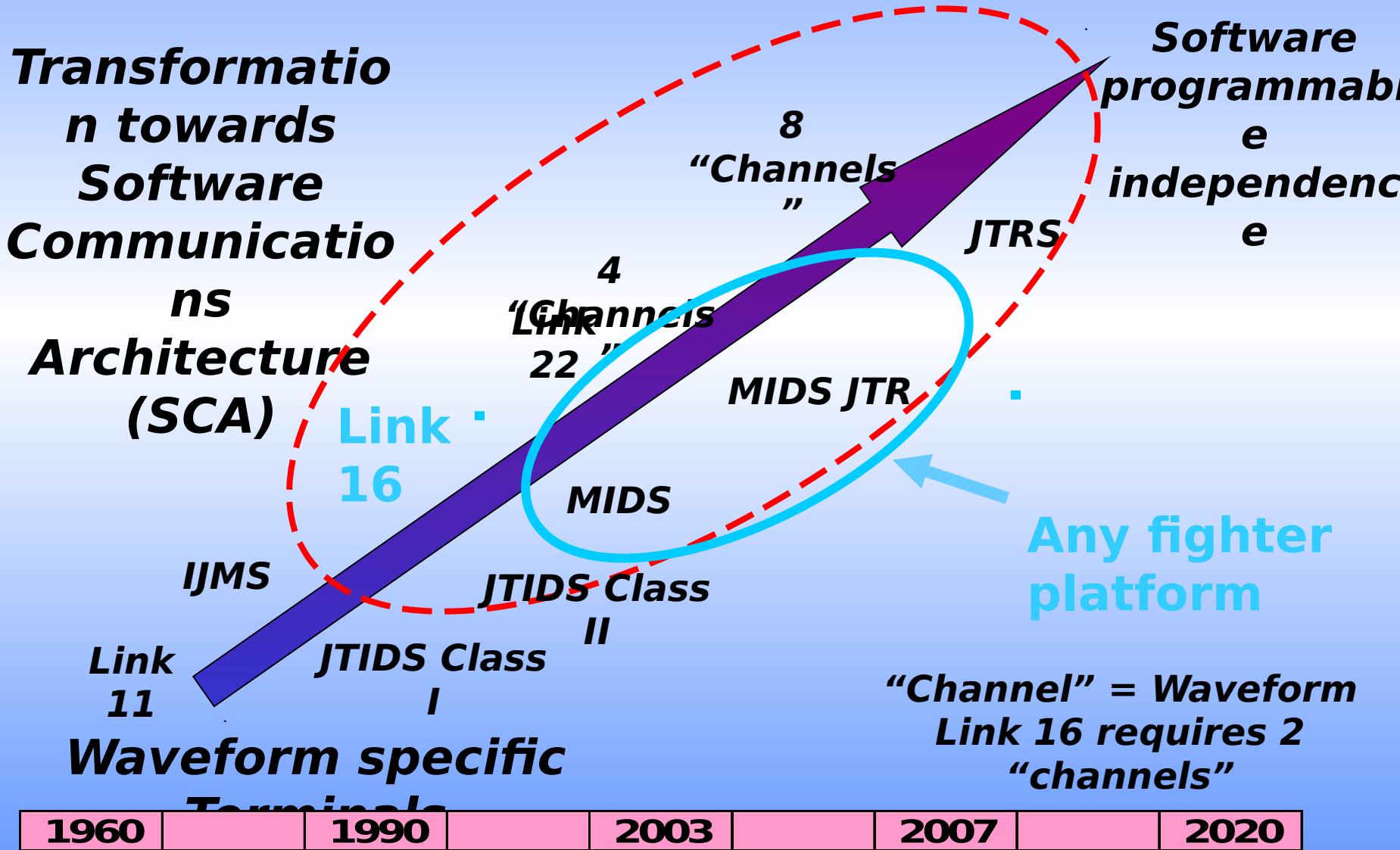
C4ISR Coalition / Interoperability Partner Challenge



C4ISR Capability Roadmap - Data Links

Transformation towards Software Communications Architecture (SCA)

Terminals



Seapower 21 Coalition

Capabilities

FORCEnet

<i>Capabilities</i>	<i>Examples of Products</i>
Provide Network Protection	Information Assurance
Provide Information Transfer	Data Links --- JTRS
Provide Deployable ISR Assets	Global Hawk, Broad Area Maritime Surveillance (BAMS), Multi-Mission Maritime Aircraft (MMA)
Share ISR Across the Force	Data Links --- JTRS
Participate in Mission Planning	Global Command and Control System (GCCS)
Maintain Operational Level Situational Awareness	Common Operational Picture (COP)
Maintain Tactical Level Situation Awareness	Common Tactical Picture (CTP)

Global Information Grid

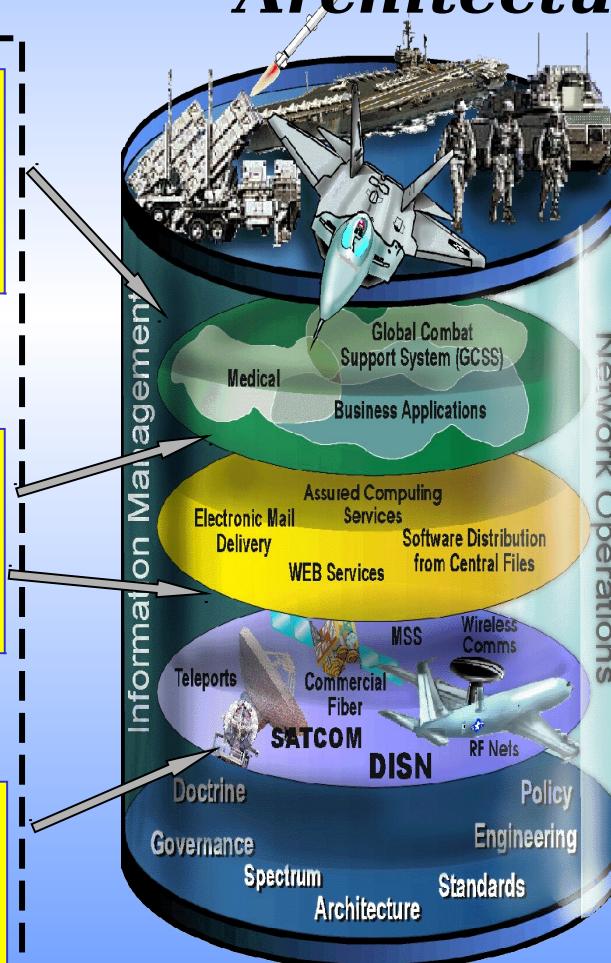
**FORCEnet
NCPs**

*Common
Operational
and Tactical
Picture*

*Communication
and
Data
Networks*

*Intelligence,
Surveillance &
Reconnaissance*

**GIG
Architecture**



Navy IPO Products and Processes

- Foreign Military Sales
 - ***Price and Availability***
 - ***Letters of Offer and Acceptance***
- Excess Defense Articles
 - ***Grant and Sale***
- Training Support (thru NETSAFA)
- Team International
 - Cooperative Programs
 - Foreign Comparative Testing
 - MOUs
 - Export Licenses
 - Data Exchange Agreements
 - Technology Transfer
 - Visit Requests

Summary

- **Coalition Building and Interoperability**
- **Capabilities Focus - Sea Power 21 alignment, directed by COCOM**
- **Countries Small to Big -- all important**
- **Join us in the iterative strategy-to- systems process using the Phased approach for C4ISR**
- **Our common goals demand the best connectivity for everyone's Homeland Defense in this Global War on Terror**